
FIRE PREVENTION AND BUILDING SAFETY COMMISSION
Department of Homeland Security

Written Interpretation of the State Building Commissioner

Interpretation #: CEB-2021-23-2010 NFPA 13-8.6.5.3.1

Building or Fire Safety Law Interpreted

[675 IAC 28-1-5](#) NFPA 13 2010 Edition, Standard for the Installation of Sprinkler Systems

Paragraph 8.6.5.3.1 Continuous or noncontinuous obstructions that interrupt the water discharge in a horizontal plane more than 18 in. (457 mm) below the sprinkler deflector in a manner to limit the distribution from reaching the protected hazard shall comply with 8.6.5.3.

Paragraph 8.15.1.1 Concealed Spaces Requiring Sprinkler Protection. Concealed spaces of exposed combustible construction shall be protected by sprinklers except in concealed spaces where sprinklers are not required to be installed by 8.15.1.2.1 through 8.15.1.2.18 and 8.15.6.

Issues

1. Whether telescoping bleachers are considered obstructions under which sprinkler heads are required by Paragraph 8.6.5.3.1 of the 2010 *NFPA 13 Standard*.
2. Whether telescoping bleachers create concealed spaces that require sprinkler heads under Paragraph 8.15.1.1 of the 2010 *NFPA Standard*.

Interpretation of the State Building Commissioner

1. Telescoping bleachers are not considered obstructions under which sprinkler heads are required by Paragraph 8.6.5.3.1 of the 2010 *NFPA 13 Standard*.
2. Telescoping bleachers require sprinkler head installation under Paragraph 8.15.1.1 of the 2010 *NFPA 13 Standard* only if, when stored, the bleacher system and its surrounding construction create a concealed space of exposed combustible construction as described under the paragraph, *and* if they and their surrounding construction do not present conditions specifically exempted from sprinkler installation under Paragraphs 8.15.1.2.1 through 8.15.1.2.18.

Rationale

Paragraph 8.6.5.3.1 is a subparagraph to 8.6.5.3, which, along with all its other subparagraphs, describes the circumstances under which horizontal obstructions must have sprinkler heads installed beneath them. All of these regulations must be viewed together to arrive at a comprehensive understanding of what constitutes an obstruction that requires sprinkler head installation and what does not. Telescoping bleacher systems are not specifically among the named obstructions. While they may share common characteristics with some of the named obstructions, we must also consider subparagraph 8.6.5.3.4 which explicitly states, "Sprinklers shall not be required below obstructions that are not fixed in place, such as conference tables." While telescoping bleachers are certainly not conference tables, they are also not fixed in place. They may be permanently installed, but they are not fixed in either the deployed or stored positions, or anywhere in between. They are mobile within their designed range of movement. The space they cover when deployed for use is fully open to the overhead ceiling sprinklers when the bleachers are closed for storage. Further, it would be a practical impossibility to design and install effective sprinkler coverage under open, deployed bleachers that would not also interfere with their range of movement, and their efficient and complete storage when closed.

Paragraph 8.15.1.1 does not address horizontal obstructions as requirements for sprinklers, but rather concealed spaces of exposed combustible construction as a requirement for sprinkler coverage. It also references a rather broad range of specific construction conditions which are explicitly exempted from the requirement. To determine whether this regulation applies, one needs to examine the conditions when the bleachers are open and deployed, and when they are closed and stored.

When open and deployed, typical bleachers do not present a concealed space. Access to the space beneath them maybe discouraged for the unauthorized, but it is usually possible for staff. If a concealed space cannot be said to exist, then the regulation does not apply.

Depending on the design and installation, the same could be said of the system when in its closed, stored state. It is impossible for this interpretation to authoritatively state that all telescoping bleachers when closed require or do not require sprinklers under this regulation, simply because they can be designed, configured, manufactured, and installed in myriad ways, and from a variety of materials. Also, their surrounding construction may be similarly

varied, including whether or not it is combustible. The designer and the local official must examine them individually to see if they are exempted by the specific examples provided in the standard, and if not, whether their design and installation constitutes both required characteristics stated in the paragraph: creation of an actual concealed space, *and* the presence of unprotected combustible construction. Both must be true for the requirement to hold.

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